# **RUTHERFORD COUNTY FUTURE LAND USE SCENARIOS**

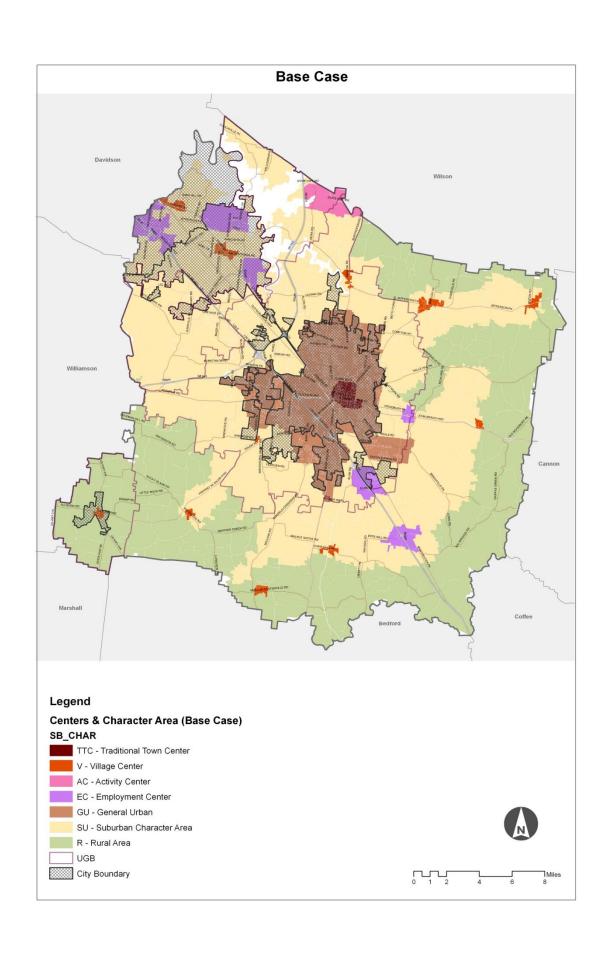
Three scenarios showing future growth in Rutherford County have been prepared for evaluation. All three share some common assumptions:

- Each future scenario is based on the same set of population, job, and household projections, through the year 2035. These numbers are a total County population of 409,986, representing 163,719 households, and 226, 453 jobs.
- Each future scenario will recognize constraints on the location of development based on floodplains, and areas of excessive slope.
  Additionally, the 2 alternative scenarios to the Base Case will recognize the presence of prime farmland soils, wildlife management areas, state natural areas, and locations of rare and endangered plant and animals.

To help compare the scenarios, the goals and concerns of the County have been expressed where possible in terms that can be measured, known as Measures of Effectiveness. Numbers are produced for each of the Measures to quantify goals. The Measures will be used in combination with the more qualitative assessments of each scenario to allow the Steering Committee to select their Preferred Alternative.

New growth will be assigned to locations in the County that area divided into Character Areas, and Center Types. The Character Areas are Urban, Urban Fringe, Suburban, Rural, and Conservation. Each Area will have different development characteristics, in terms of the land uses and densities. They reflect existing and planned infrastructure, as well as current development already on the ground.

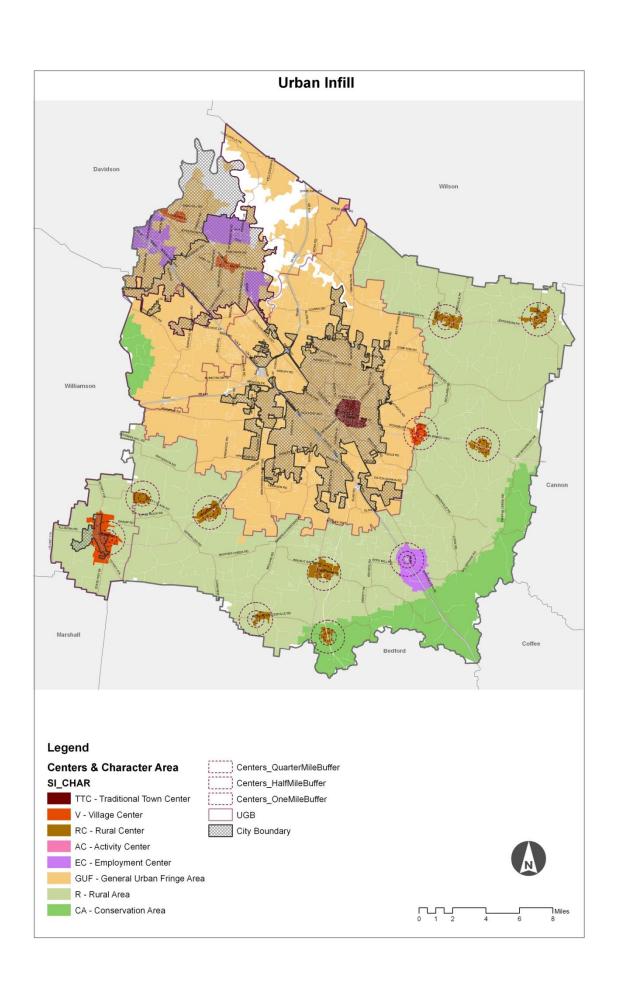
The Rutherford County Comprehensive Plan Steering Committee has decided that Character Areas will be combined with Centers to organize future growth. Centers are compact areas, usually near crossroads or in locations with existing development outside of municipalities. They include Employment Centers, Activity Centers, Village Centers, and Rural Centers. Each have their own purpose, their own mix of uses at different densities, and represent the idea that future growth that is organized and compact will have fewer detrimental effects on the environment, transportation, and county services.



## **Base Case Scenario**

The Base Case scenario shows where future growth is likely to be located using a set of "Suitability Factors" that help decide which parcels and areas are more "suitable" than others to accommodate new growth. These factors include whether or not land is in proximity to major intersections, floodplains, areas of excessive slope (over 25%), rare plant and animal species, parks, water, sewer, existing development and employment, among others. Also taken into account is the type and locations of existing development based on current zoning trends and any land use policies in place. The result is a map that shows 2035-levels of development based on current trends and suitability factors. Under this scenario, new growth will follow the same pattern as past growth, which is largely low-density, scattered development in all areas of the County. Residential and non-residential uses will occur at random locations, adding to the loss of agricultural land, endangering historic and cultural resources. New areas of development will compete with existing rural communities and require further expansion of water and sewer systems.

The 2 following scenarios use the same suitability factors as the Base Case, with the addition of 3 new factors: the location of land within an Urban Growth Boundary of one of the municipalities, proximity to existing county school sites, and location within one of the identified "Centers" outside of the municipalities into which new growth will be directed.



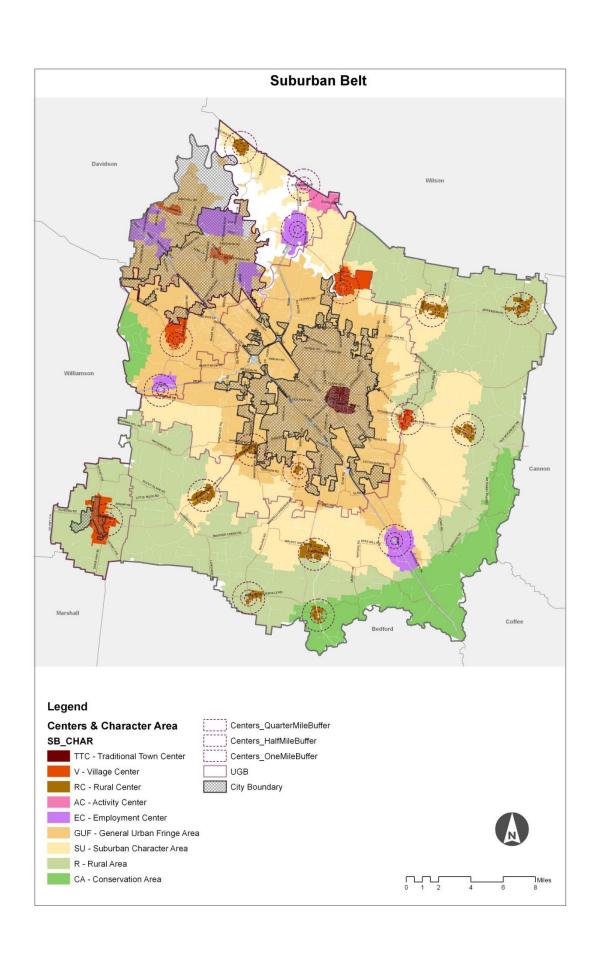
## **Urban Infill Scenario**

This scenario was created to evaluate a development pattern that encourages higher densities inside the Urban Growth Boundaries of Smyrna and Murfreesboro, encourages the creation of rural "nodes" or "centers" outside of the UGBs to concentrate non-urban growth, encourages low development densities outside UGBs and centers, and creates conservation areas to discourage growth where the land is steep and floodplains are present.

More dense, urban-style development is pictured for an area roughly approximating the Urban Growth Boundaries of Murfreesboro and Smyrna, and labeled a General Urban Character Area. Within those growth areas, new development nodes are established to concentrate jobs and residences, north of Murfreesboro on Jefferson Pike, east of Murfreesboro on Highway 70 (John Bragg Highway) and south of Smyrna along Almaville Road. Smaller areas of concentrated growth are also planned adjacent to Murfreesboro. The intent is not to identify specific parcels, but rather to evaluate the impacts of a tighter development pattern in general locations. Outside the centers, growth will still occur, and at a more urban level than lands outside the Urban Character area.

Sections of the County beyond the Urban Character Area are labeled Rural Character Areas. Rural centers are created based on existing and likely development. These centers would have the majority of new development located in a more compact design, encouraging walkability, connectivity and a closer proximity of jobs to new employment opportunities. A Village Center is placed around Eagleville to help build density for future infrastructure planning, and to encourage the development of a jobs and housing center outside of the I-24 communities to the northeast. Within the Rural Character area and outside the Centers, development will be lower density and directed toward existing roads and highways.

Two areas are labeled for Conservation. These areas are approximate, and depend on the actual location of lands where excessive slope or soil conditions are considered a development barrier.



## Suburban Belt Scenario

This scenario was created to evaluate a development pattern that encourages high density growth within 1 mile of Murfreesboro, and within the Urban Growth Boundary of Smyrna, as well as encompassing an Employment Center designation south of Murfreesboro on I-24 into an Urban Fringe Character Area. Development within this character area will be at densities and with a mix of uses similar to those inside the cities, but slightly less dense. The development densities currently allowed today county-wide would be carried forward to the Suburban character area, the next "belt" of growth that extends outward from the Urban Fringe into lands that already have experienced suburban-type development patterns. This area was identified during a Steering Committee workshop, and is a transition between lower density on the edges and higher densities immediately adjacent to Smyrna, Lavergne, and Murfreesboro.

The outer "belt" of development, Rural, would have much lower densities, with two areas on the county edges labeled for "conservation" due to slope and soil issues.

There are slightly fewer "centers" identified in this scenario to model the effects of placing a majority of new houses and job sites into more concentrated settings.

# **Measures of Effectiveness**

Each scenario is being modeled using CommunityViz®, a GIS-based software tool that analyzes proposed land use patterns and documents the effects based on specific measures. For Rutherford County, the following Measures of Effectiveness have been created based on input gathered from stakeholders, the public at large, and the Comprehensive Plan Steering Committee. They will help the Steering Committee and the County decide which future growth scenario best meets the Goals and Vision of the Comprehensive Plan. The measures are:

- Number of acres consumed by new development
- Percent of new growth in ½ mile proximity to schools
- Commercial/Retail/Service uses square footage
- · Dwelling units within identified centers
- Percent of total dwelling units within 1 mile of centers
- Percent of total development within centers
- Total acres in parks, open space, conservation areas
- Number of environmentally-sensitive acres converted
- Percent of population within Walkable Centers (within ¼ mile of a center or less than 20 dwelling units/acre)
- Percent of population/number of households within ½ mile of proposed greenways or bike paths
- Amount of prime agricultural land converted to development
- Dwelling units within ¼ mile of transit

- Dwelling units within ¼ mile of an arterial roadway
- Percent of new growth in proximity to sanitary sewer service areas
- Water consumption per dwelling unit of residential growth, or per square foot of non-residential growth

The results of the Measures of Effectiveness will be presented to the Steering Committee on June 21<sup>st</sup>, after the modeling is completed.